

REMARKS

The present Amendment amends claims 1-13. Therefore, the present application has pending claims 1-13.

Figs. 1, 5, 6, 10, 11 and 12 stand objected to due to informalities as noted by the Examiner in paragraph 2 of the Office Action. Filed on even date herewith are Proposed Drawing corrections correcting the informalities noted by the Examiner. Therefore, this objection is overcome and should be withdrawn.

The specification, specifically the abstract, stands objected to due to informalities as noted by the Examiner in paragraphs 4 and 5 of the Office Action. Amendments were made to the abstract to more clearly describe the invention. Therefore, this objection is overcome and should be withdrawn.

Claims 1, 4, 5, 8 and 10 stand rejected under 35 USC §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regards as the invention. Various amendments were made throughout claims 1, 4, 5, 8 and 10 to bring them into conformity with the requirements of 35 USC §112, second paragraph. Therefore, reconsideration and withdrawal of this rejection is respectfully requested.

Specifically, amendments were made to claims 1, 4, 5, 8 and 10 to overcome the objections noted by the Examiner in paragraphs 6-8 of the Office Action. The Examiner's cooperation is respectfully requested to contact Applicants' Attorney by telephone should any further indefinite matter be discovered so that appropriate amendments may be made.

Claims 1-7 and 10-13 stand rejected under 35 USC §102(e) as being anticipated by Ramasubramani (U.S. Patent No. 6,507,589); and claims 8 and 9 stand rejected under 35 USC §102(e) as being anticipated by Hall (U.S. Patent No. 6,414,962). These rejections are traversed for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in claims 1-13 are not taught or suggested by Ramasubramani or Hall whether taken individually or in combination with any of the other references of record. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw these rejections.

Amendments were made to the claims so as to more clearly recite that the present invention is directed to an information providing method and a gateway apparatus for use on a communication network including a server for providing information service, the gateway apparatus and a mobile packet communication network accommodating a mobile terminal and including a service management node for managing visit location information of the mobile terminal in the mobile packet communication network. According to the present invention the gateway apparatus is capable of communication with the mobile terminal, the server and the service management node.

Thus, the present invention includes making a request to set management information from the service management node to the gateway apparatus, in an execution process of a procedure for accommodating the mobile terminal to the mobile packet communication network, registering management information including a service identifier of information service regarding the mobile terminal into

a management table by the gateway apparatus in response to reception of the setting request, checking whether a service request has been issued to the server with respect to the information service corresponding to the service identifier by the gateway, and making the service request, if the service request has not been issued, by the gateway apparatus to the server to start the information service.

Thus, as apparent from independent claims 1, 8 and 10, the features of the present invention reside in the communication between a service management node for managing visit location information of a mobile terminal and a gateway apparatus, the communication between the gateway apparatus and a server for providing information service to the mobile terminal, and the communication between the gateway apparatus and the mobile terminal.

A first feature of the present invention resides in that the present invention resides in that the service management node requests the gateway apparatus to set management information of a mobile terminal when the mobile terminal is accommodated (connected) to the mobile communication network. The management information includes a service identifier of information service to be supplied to the mobile terminal.

A second feature of the present invention resides in that the gateway apparatus automatically issues a service request for the information service specified by the service identifier to the server when the service request has not been issued yet.

According to the present invention, due to the above features, it is possible to automatically provide push-type information service to a mobile terminal without

requiring a function change to the mobile terminal as stated in pages 41 and 42 of the specification.

The above described features of the present invention as now more clearly recited in claims 1-13 are not taught or suggested by any of the references of record, particularly Ramasubramani or Hall whether taken individually or in combination with any of the other references of record.

Ramasubramani, for example as illustrated in Figs. 1, 2, 6, 9 and 20 and as described in col. 2, line 48 through col. 3, line 35 thereof, teaches a method and apparatus for routing messages between a mobile terminal and service centers through network gateways. Particularly, Ramasubramani teaches that a gateway, upon receipt of a message from a mobile device, obtains a destination port identifier from the message, and routes the message to an addressable process within the gateway that is associated with the destination port identifier.

The features of the present invention as now more clearly recited in the claims are not taught or suggested by Ramasubramani. For example in the Office Action the Examiner referred to Figs. 1, 2, and 9 of Ramasubramani as showing apparatus corresponding to the service management node having the first feature of the present invention as described above and as recited in the claims. However, the features of the present invention regarding the service management node are not taught or suggested by Ramasubramani. There is no teaching or suggestion in Ramasubramani that the gateway 214 shown in Fig. 2 and the NB-router 906 shown in Fig. 9 receives a request from another node to set management information of a mobile terminal as in the present invention as recite in the claims.

Further, there is no teaching or suggestion in Ramasubramani of the second feature of the present invention as described above and as recited in the claims. In the Office Action the Examiner referred to col. 13, lines 51-53 of Ramasubramani as disclosing the registering and checking steps recited in the claims. However, this passage of Ramasubramani merely discloses how to transfer a request from the wireless communication device 922 or 928 to a pull agent 904. Thus, clearly there is no teaching or suggestion in Ramasubramani of the above described second feature of the present invention as recited in the claims.

Thus, Ramasubramani fails to teach or suggest making a request to set management information from the service management node to the gateway apparatus, in an execution process of a procedure for accommodating the mobile terminal to the mobile packet communication network, registering management information including a service identifier of information service regarding the mobile terminal into a management table by the gateway apparatus in response to reception of the setting request, checking whether a service request has been issued to the server with respect to the information service corresponding to the service identifier by the gateway, and making the service request, if the service request has not been issued, by the gateway apparatus to the server to start the information service as recited in the claims.

Therefore, Ramasubramani fails to teach or suggest the features of the present invention as recited in the claims. Accordingly, reconsideration and withdrawal of the rejection of claims 1-7 and 10-13 under 35 USC §102(e) as being anticipated by Ramasubramani is respectfully requested.

The above noted deficiencies of Ramasubramani as described above are not supplied by any of the references of record, and are also evident in Hall.

Hall appears to have been cited by the Examiner for an alleged teaching of the features of the present invention as recited in claim 8. However, the features of the present invention are clearly not taught or suggested by Hall. In fact Hall fails to teach or suggest the above described first and second features of the present invention as recited in the claims the same as Ramasubramani.

Thus, Hall fails to teach or suggest a making a request to set management information from the service management node to the gateway apparatus, in an execution process of a procedure for accommodating the mobile terminal to the mobile packet communication network, registering management information including a service identifier of information service regarding the mobile terminal into a management table by the gateway apparatus in response to reception of the setting request, checking whether a service request has been issued to the server with respect to the information service corresponding to the service identifier by the gateway, and making the service request, if the service request has not been issued, by the gateway apparatus to the server to start the information service as recited in the claims.

Therefore, Hall fails to teach or suggest the features of the present invention as recited in the claims. Accordingly, reconsideration and withdrawal of the rejection of claims 8 and 9 under 35 USC §102(e) as being anticipated by Hall is respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references utilized in the rejection of claims 1-13.

In view of the foregoing amendments and remarks, applicants submit that claims 1-13 are in condition for allowance. Accordingly, early allowance of claims 1-13 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER & MALUR, P.C., Deposit Account No. 50-1417 (520.39903X00).

Respectfully submitted,

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